BRIEF ON BEHALF OF PETITIONER

The case in which this petition prays certiorari is *Bailey v. Sears, Roebuck & Co.* (C.C.A. 9), 115 F. (2d) 904. The jurisdictional grounds are set up in the petition.

Concise Statement Containing All That is Material to the Question Presented

Lester W. Bailey, Patentee-Petitioner, is an electrical engineer. (95) Respondent, the well known mercantile house, is only nominally interested. The case was defended by the Colonial and Stewart-Warner manufacturing companies who made the accused radios which the Respondent sold. The main witnesses were Fulton Cutting, Ph.D., radio engineer since 1916, member of American Institute of Electrical Engineers, Past President and member of Institute of Radio Engineeres, Chairman of the Board of Directors of Colonial Radio Corporation (151), and William E. Newman, chief dial designing engineer of Radio Corporation of America (120), both on behalf of the Respondent, and Mr. Bailey on his own behalf. All of these witnesses were equally interested in the result, Mr. Newman's company being also a substantial infringer.

This is the first adjudication of this patent. Nevertheless petitioner believes that all the pertinent prior art has been cited. The case was commenced in August, 1936, and tried in January, 1938.

In that time the combined engineering forces of Colonial, Stewart-Warner and RCA should have produced all the pertinent art in existence. Dr. Cutting's memory runs back to the earliest beginning of the radio industry.

No question of fact is involved in this petition upon which there is any conflicting testimony in the record.

After the trial the Master kept the case under advisement for nearly a year before filing Findings and Conclusions. (18) Petitioner filed some fifty objections to the Findings on validity (41), all of them upon either of two grounds: (1) Findings by the Master for which there was no support whatever in the testimony, and (2) failure of the Master to find facts in accordance with undisputed testimony. The Master's findings included statements based on several theories that the patent was invalid. All of these reasons for invalidity have since been discarded.

The District Court (83) failed to sustain any objections tending to correct the misrepresentations of the record contained in the Master's report but held the patent invalid upon the ground that it was anticipated by watches and clocks. There is no evidence whatever in the record tending to explain or disclose information concerning the construction and method of operation of watches and clocks, or the problems of the horological art.

The Circuit Court of Appeals disregarded the horological theory presumably as outside the record and based on casual, offhand misinformation about the operation and construction of timepieces. That Court apparently considered five of the eight reference patents insufficiently relevant to justify mention in its opinion. The Master's report is now, we think, pretty largely discredited except that some of his misapprehensions of undisputed record have crept into the opinion of the Ninth Circuit.

All of these exclusions and eliminations have brought the three able justices of the Ninth Circuit down to Rysman (469), Hall (458) and Huth (443), as the soundest basis for a determination of patentability. (Exhibit 24, 160) We concur in this, even though we differ as to the result they reached.

Of these three references, Hall differs from Rysman, but insofar as the patent in suit is concerned Hall is less pertinent than Rysman. If Hall negatives invention in the patent in suit, Rysman does. If Rysman does not, Hall cannot. Huth discloses only a single pointer attached to a condenser shaft and is of secondary interest only. This brings us down to Rysman, the reference over which the Patent Office issued the patent in suit.

The record here is not such as would permit any Court to hold on the facts that respondent has sustained the heavy burden cast upon it; *Radio Corp. v. Radio Lab.,* 293 U.S. 1, 7. The Master ignored the presumption of validity. (19-40) The District Court

recognized it but held that the Patent Office was wrong in relating the patent to the radio art instead of to the clock art and other non-analogous arts. (83-84) The Circuit Court of Appeals held as a matter of law that the new functions and results could not be considered on the issue of validity because they are not set forth in the patent. Thus the presumption has heretofore been disregarded.

So much for the previous course of the case.

For the preliminary facts, we quote the first paragraph of Justice Wilbur's opinion:

> "This is a suit by the patentee, Lester W. Bailey, for alleged infringement of his patent No. 1,907,473 for an indicating device designed to show 'the exact angular position of the rotor blades' of a condenser, such as is used in a radio receiving set. The device is useful in tuning in stations whose dial readings are known. The device described in the patent consists of a dial with two hands, one moving ten times as rapidly as the other, although the patent is not confined to this ratio. The indicator dial corresponds to the face of a watch and the two hands to the hour hand and the minute hand of a watch. Both hands are operated by a single knob turned by hand. The hands are connected with each other by gears so arranged that as the knob is turned both hands are moved in the predetermined ratio. In the device shown in the patent the shorter hand is rigidly connected to the axis upon which the rotor blades of the condenser are mounted. The other hand is attached to a concentric sleeve on the same axis which is operated by a set of meshed gears or other means deriving power from the axis which is turned by the knob so arranged as to multi-

ply the movement of the sleeve over that of the axis by the predetermined ratio."

The Bailey mechanism is for tuning, logging and retuning short wave signals. Some short wave stations are not hard to tune. Some sets are arranged to tune only a few stations in the short wave band but to tune them easily. But this record concerns sets made to tune to any part of the short wave band in which signals were being sent and to *log stations and re-tune them later.* (Cutting 155)

Some of these short wave stations are extremely close together and difficult to tune, log and re-tune. The record affords an instance where the movement of a coarse indicator only the width of a calibration line brought in three separate stations. (Bailey 266) Stations may be 10 times as close in the short wave bands as in the broadcast band. (Cutting 201, 221) At 10,000 kilocycles the movement of a coarse pointer directly connected with the condenser shaft would be only a few thousands of an inch tuning from one short wave station to another. (Newman 131)

When a variable condenser operating and indicating mechanism is made with two pointers, one pointer is called a coarse or slow pointer and the other a fine or fast pointer. The slow pointer turns at about the speed of the condenser shaft and therefore registers on the dial approximately the positions of the condenser shaft and blades. A condenser turns through an arc of about 180 degrees. If a coarse pointer were made to turn more than twice as

much as a condenser shaft it would lose its entire purpose because it would not then indicate on the dial the angular position of the condenser shaft and the tuning of the set. In other words it would not give a unique reading.

In concentric two pointer mechanisms characterized by a shaft and a surrounding sleeve each one of which bears a pointer, the shaft must necessarily project beyond the sleeve. If the end of the shaft were inside the end of the sleeve, the sleeve itself would prevent the attachment of a pointer to the shaft. The shaft and sleeve project through the dial. Therefore the pointer attached to the shaft is necessarily farther from the dial calibrations than the pointer attached to the sleeve. Parallax error is greater on the shaft pointer than on the sleeve pointer. (Cutting 214).

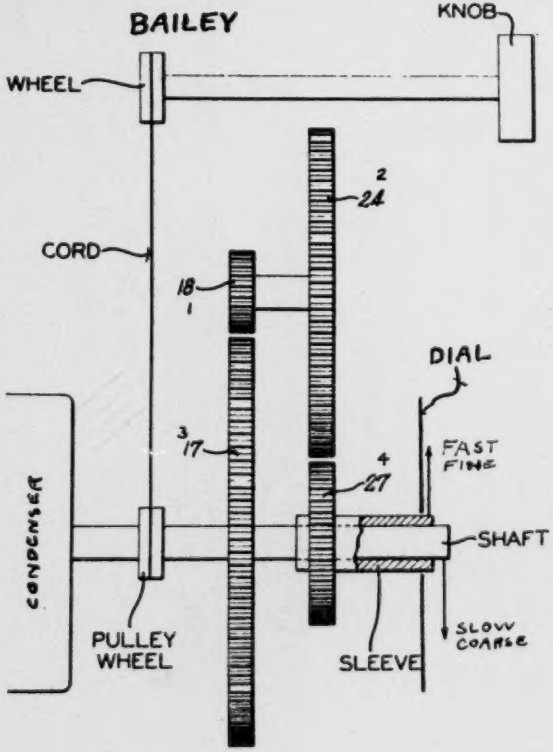
When the condenser shaft is turned over an exceedingly small angle necessary to tune from one short wave station to another in a crowded portion of the band the coarse or slow pointer covers such a small movement on the dial that it cannot be accurately read, but the fine or fast pointer covers a much greater space on the dial and therefore its change of position can be accurately read, *provided* the mechanism is designed so that the fine pointer indicates the various positions of the condenser shaft with *extreme fidelity.* (265) This is the overall problem solved by the patent in suit.

In order to understand the new functions and results inherent in the Bailey mechanism over those of the prior art, it is necessary to point out differences in structure. Because Hall is less pertinent than Rysman we do not burden this brief with a description of Hall. Nor do we now discuss Bailey's second claim. If what we say is right as to Claim 1, it is right as to Claim 2, the latter being similar but somewhat broader.

In the attached diagram we include Bailey and Rysman. We use Defendant's Exhibit 22 (426, 160, 255) prepared by Dr. Cutting instead of the patent drawing because of its greater simplicity. We have cut off parts of both condensers to conserve space. The dials face each other. You are looking down on Rysman and at a side elevation of Bailey. Let us compare and contrast.

Bailey's condenser shaft, marked "shaft", extends from the condenser through a hole in the dial. The dial is shown as a line. (We have added this to Dr. Cutting's drawing.) Rysman's condenser shaft is at right angles to his shaft which extends through his dial. The shafts e and f are connected by a motion multiplying bevel gear train i, h which makes shaft f turn 12 times as fast as the condenser shaft e. It is necessary for Rysman to have this step-up gear train in order to have a fast pointer.

Rysman's condenser shaft bears no pointer. Bailey's bears his slow pointer which turns on the


BAILEY
KNOB
WHEEL
CORD
2
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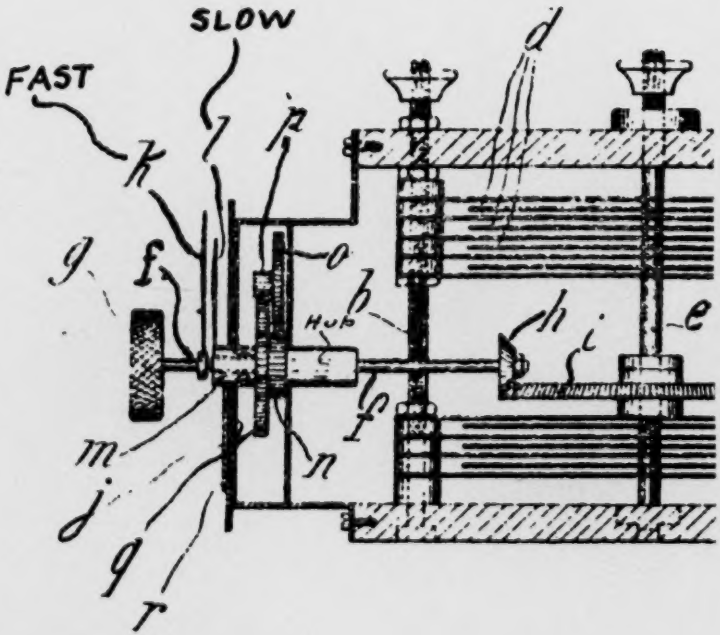
18
1
DIAL
3
17
4
27
FAST
FINE
SHAFT
CONDENSER
PULLEY
WHEEL
SLEEVE
SLOW
COARSE

Rysman

Fig. 1


SLOW
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dial the same angular distance that the condenser shaft is turned and thus coarsely but uniquely indicates the angular position of the shaft and the tuning of the set.

Rysman can and does put a pointer k on the end of shaft f which projects through the dial. Since this pointer k turns over dial calibrations an angular distance 12 times as great as the condenser shaft it will not serve as a slow pointer. It will not afford a unique reading of the angular position of the condenser shaft or the tuning of the set. This pointer k is Rysman's fast, fine pointer.

Rysman must add a slow pointer, otherwise his machine will be useless. Therefore, having multiplied by 12 the angular movements of his condenser shaft and transmitted the results to shaft f, he now divides by 12 the angular movements of shaft f. (This mechanically awkward arrangement must have been apparent to the Patent Office.) Rysman accomplishes this by his motion reducing gear train n o p q. Gear n appears to be fast to a hub which is fast to shaft f. Gear q is fast to a sleeve M which is loose on shaft f. Sleeve m will turn an angular distance equal to that of the condenser shaft. Rysman affixes his slow, coarse pointer to sleeve m.

Bailey having put his slow pointer on his condenser shaft must arrange for a fast pointer. He therefore attaches gear 17 to his condenser shaft and connects it with the motion multiplying gear

train 18, 24, 27. He affixes gear 27 to a sleeve which loosely surrounds his condenser shaft. He then affixes his fast, fine pointer to the sleeve. He thus uses one motion multiplying gear train, whereas Rysman requires first a step up gear train then a step down gear train.

Both inventions require knobs for manual operation. Rysman fastens his knob to the end of his fast pointer shaft f. Bailey places his knob on a separate shaft, and suggests operation by pulley cord and wheels.

Before coming to the new functions and results of Bailey over Rysman it is necessary to summarize the important structural similarities and differences between the two mechanisms, which were fully apparent to the Patent Office when it issued the Bailey patent over Rysman.

Each inventor describes a shaft and surrounding sleeve projecting through the dial, bearing pointers turning concentrically on an axis consisting of the center line of the shaft. In both mechanisms the shaft must project beyond the sleeve, otherwise the shaft could not bear a pointer. The shaft pointer must be outside the sleeve pointer and farther from the dial calibrations.

Rysman places his fine pointer on his shaft where it will be farther from the calibrations and his coarse pointer on the sleeve where it will be closer.

Bailey places his coarse pointer on the shaft and farther from the calibrations and his fine pointer on the sleeve and closer to them.

Rysman affixes his knob tightly to the same shaft to which his fast pointer is affixed.

Bailey separates his knob from his fast pointer and inserts between them means which transmit rotary but not translatory motion.

Rysman shows a motion reducing gear train to turn his sleeve and attached coarse pointer 1/12th as fast as his stepped up shaft bearing his knob and fine pointer. Bailey needs no motion reducing gear train.

Both show motion multiplying gear trains to turn their fast pointers at predetermined speeds greater than their condenser shafts.

New Functions and Results

Such are the important structural similarities and differences between Rysman and Bailey. Mr. Bailey testified to a number of new functions and results inherent in his structure over the prior art of which Rysman is the most pertinent representative. None of his testimony was contradicted and it stands undisputed in the record. If Mr. Bailey's claims in this regard were untrue or exaggerated there is nobody, we think, in the entire radio industry better qualified to point this out than Dr. Cut-

ting and Mr. Newman. Yet they did not take exception to his testimony.

The Court will bear in mind how this issue was raised in the lower court. No burden was cast upon the Plaintiff to prove his asserted new functions and results. A heavy burden was upon the Defendant, *Radio Corporation v. Radio Laboratories,* 30 U.S. 1, 7, to show that *none* of them existed. A single new result may support a patent.

The new functions and results are as follows:

"Ratios". Depending upon other factors it is desirable that the designer of a radio set should be able to choose any ratio he desires between (1) knob and condenser shaft, and (2) fast pointer and condenser shaft. (275, 278) Bailey permits him to choose such ratios; Rysman does not. (143, 296, 297) In Rysman (also Hall) since the fine pointer is affixed to the knob shaft, the knob and fine pointer must turn together, and the ratios of both to the condenser shaft must be the same (297).

The Crowe catalog (Exhibit 15, 112) emphasizes the importance of being able to vary the ratios. (Appendix) The accused models have greatly variant ratios which they could not have if they imitated Rysman or Hall instead of Bailey. (Exhibit 37, 414, 275)

Translatory Motion. This is any motion in a straight line as distinguished from rotary motion. (346) In Rysman the knob and fine pointer are

fixed to the same shaft f. Any jiggling of Rysman's knob by the fingers operating it necessarily jiggles the fine pointer. This permits the fine pointer to move independently of the condenser and produces error in reading. (293) In Bailey substantially all motion other than rotary motion imparted to the knob is absorbed or insulated from the fine pointer by means of the pulley and cord, gear train, friction drive, or other device interposed between knob and fine pointer. (295, 367)

Let us refer again to the accused models. In 4586, apparently the most popular model, the fast pointer turns eight times as fast as the condenser shaft. (Exhibit 37, 414, 275) This exhibit shows that to tune from one short wave station to another where the two stations are 10 kilocycles apart in the average part of the foregin short wave band the end of the fine pointer of this model would move only 11/1000 of an inch. (Ex. 37, last line.) (Newman 131, Bailey 277). In the crowded portion of the short wave band the distance traveled by the end of the fine pointer would be only 5/1000 of an inch. (Ex. 37, 3rd to last line.)

Mechanisms of this sort must be built as cheaply as possible of punch-press and screw machine parts for quantity production. (271) Bearings cannot be made exact. Knob shafts sometimes wobble to the extent of 1/8 inch. (Bailey 340-341)

Absence from the patent in suit of the effect on Rysman's fine pointer of translatory movement of

the knob is a real advantage. If Rysman's knob is wiggled 1/8 inch his fine pointer will wiggle an amount varying from nothing if this pointer is extended in the direction of the lateral movement to 1/8 inch if it is extended at right angles to the direction of the movement. 1/8 inch is 25 times 5/1000 inch and it is over 11 times 11/1000 inch. Rysman's fine pointer may be regarded as 1/25 to 1/11 as accurate as is necessary to log and retune short wave stations. (Bailey 277, 340)

Mr. Bailey was cross examined on this subject. We quote: (338)

> "Q. Referring now to the Rysman French patent, you spoke about translatory effects of the knob. Does your patent contain any disclosure with respect to knob translatory effects?
>
> A. It discloses a knob in which those effects are inherently absent."

Parallax. (Parallax is apparent displacement of an object seen from two positions. (144) In Rysman the fine pointer is farther from the calibrations; in Bailey it is closer. (Cutting 214) When the operator is trying to select one of several closely spaced stations it is the fine pointer which must be closely read against the calibrations, and this pointer should be as close to the calibrations as possible. The parallax error increases with the distance of the fine pointer from the calibrations. (273) Such error is greater in Rysman and tends to be minimized in Bailey. (214)

Dr. Cutting testified (213) that we generally tune a radio from the same position. This tends somewhat to lessen the importance of parallax as a new result but does not erase it. Petitioner did not contradict Dr. Cutting's dictum but thinks it does not sufficiently allow for variation in personal habits.

Newman testified that in some cases (146) by making the fine pointer longer than the coarse pointer and bending it down at the end toward the calibrations the effect of parallax can be avoided. However, all of accused models have their fine pointers shorter than their coarse pointers. This is apparently to accommodate the different sets of calibrations necessary for the broadcast band, short wave bands, and for fine pointer reading.

The fine pointer of an average two pointer variable condenser operating an indicating mechanism must be read on the calibrations as closely as 5/1000 to 11/1000 of an inch. (Newman 131; Bailey 277; Exhibit 37, 414, 275) The minute hand of a clock is apparently read far less closely than this (Cutting 214) 5/1000 of an inch is about the thickness of a sheet of the paper on which this brief is printed.

A clock hour hand which is on 12 when viewed from the front, will appear in advance of the hour when viewed from the left, and behind the hour when viewed from the right.

If one of these side views is taken from an angle of 45° the error in reading due to parallax will just equal the space between the hour hand and the dial. If a fine pointer located on a shaft as in Rysman and therefore on the outside, 1/8 inch from the dial, standing vertically, is viewed from a side angle of 45°, the parallax error in reading this pointer on the calibrations will be 1/8 inch. 1/8 inch is 25 times 5/1000 inch. (See under translatory motion.)

The Bailey fine pointer is less subject to parallax error than that of Rysman, also Hall. This is a new function or new result of Bailey, and is inherent in his claimed structure.

Flexible Drive. A pulley and cord drive insures smooth action. (138) Such a drive is possible in Bailey but not in Rysman, or Hall (296), because in these patents the knob and fine pointer are tightly affixed. A fine pointer cannot be driven by a flexible drive. If it were the drive would slip and its relation to the condenser shaft would change. (Cutting 154)

Slip Clutch. In Rysman and Hall such a clutch can be inserted between the knob and the extension of the knob shaft only with difficulty. (353) It is readily usable in Bailey and is desirable. (274)

Dual Ratio. A choice of ratios between the knob and condenser shaft as appears on Model 4586 is desirable. In Hall and Rysman it cannot be applied at all or only with difficulty and inconvenience.

(352) In Bailey it can be readily used.

Production parts: Mechanisms of the kind under consideration must be cheaply made, of punch press and screw machine parts. (271) A punch press spur gear (257) costs about a cent. (319) A bevel gear costs more. (319, 297)

A merit of the invention in suit is that it enables the use of cheap parts of which an extremely delicate and accurate mechanism can be made.

Newman testified that to go from one short wave station to another in the 31 meter band the condenser plates would move only a few thousandths of an inch. (131) The problem is that of indicating the position of a condenser shaft within a few thousandths of an inch with a mechanism made up of parts which necessarily have a greater tolerance than this—up to one-eigth of an inch. (Bailey 340-1) This is the problem which Rysman failed to solve and Bailey solved. At first glance the problem seems impossible but the testimony tends to show that the Bailey mechanism solved it by design, not by refinement, by reducing to a minimum such errors as would naturally be caused by translatory motion and parallax.

It is inherent in the Bailey invention that it permits accuracy in indication far greater than the tolerances of the parts of which it is assembled.

SPECIFICATION OF ERROR

The Court below erred in holding that the failure of the patent in suit to set forth its new functions and results over the prior art invalidates it.

ARGUMENT

The Court below had the following to say about the new functions and results: (115 F. (2d) at 906-7) The Court does not deny that the Bailey mechanism minimizes the effect of parallax error, but says:

> "If there is any advantage in having the faster moving pointer attached to the sleeve, it is not pointed out in the patent."
>
> "but this point was not advanced as a teaching of the patent. It is evidently an afterthought, as the Master held."
>
> "Nothing is said in the claims about closeness of the pointers to the surface of the dial."

The Court does not deny the possible use of cheap manufacturing methods and materials for a highly accurate mechanism, but says:

> "but no such claim is made in the patent."
>
> "Nothing is said in the claims about . . . . the form of the gears so far as their manufacture is concerned."

The Court says after a recital of new functions and results achieved by the Bailey patent, the reality of which it does not deny:

"None of these matters are set out in, or taught by, the patent."

The Court thus repeats the same idea six times in different places. It does not deny the truth of Mr. Bailey's undisputed testimony about new functions and results, but it clearly does not give effect to it. This can only be because the Court regards it as irrelevant for the reason that the new functions and results are not set out in the patent.

Is it necessary that they be set out in the patent? If so, they must be recited in the application. Material of this kind cannot be included in claims. The statute states what must go into an application and does not provide for functions and results. U.S.C.A. 35: 33 provides:

> "Before any inventor or discoverer shall receive a patent for his invention or discovery he shall make application therefor in writing to the Commissioner of Patents, and shall file in the Patent Office a written description of the same, and of the manner and process of making, constructing, compounding, and using it, in such full, clear, concise and exact terms as to enable any person skilled in the art or science to which it appertains, or with which it is most nearly connected, to make, construct, compound, and use the same; and in case of a machine, he shall explain the principle thereof, and the best mode in which he has contemplated applying that principle, so as to distinguish it from other inventions; and he shall particularly point out and distinctly claim the part, improvement, or combination which he claims as his invention or discovery. . . ."

This court has held in effect that whatever is inherent in the structures limited by the claims of a patent is as much a part of the patent as if set forth in full therein. *Diamond Rubber Co. vs. Consolidated Tire Company,* 220 U.S. 428, 436; *Webster Loom Co. vs. Higgins,* 105 U.S. 580, 585; *Schreiber vs. Cleveland Trust Co.,* 305 U.S. 47.

On the other hand, this court has held in effect that failure of a patent to set forth a use or advantage of the structures limited by the claims may be taken as evidence that such a use or advantage does not inhere in such structures. *Union Edge Setter Co. vs. Keith,* 139 U.S. 530, 539; *Ball & Socket Fastener Co. vs. Kraetzer,* 150 U.S. 111, 116; *Lincoln Engineering Co. vs. Stewart-Warner Corp.,* 303 U.S. 545, 550.

The second of the above rules is at most a rule of presumption or inference, to be drawn from negative testimony, when the record is otherwise silent on the subject. Such a presumption or inference cannot stand before positive, affirmative, undisputed testimony such as we have in the record at bar to the effect that the asserted functions and results do inhere in the structures limited by the claims of the patent in suit. *Mobile Ry. vs. Turnipseed,* 219 U.S. 35, 42; *Lincoln vs. French,* 105 U.S. 614, 617; *U. S. vs. Ross,* 92 U.S. 281, 283-5.

The decisions of the Circuit Courts of Appeals almost uniformly hold that functions and results need not be set forth in a patent. *Tashjihan vs.*

Fordner Co. (C.C.A. 9), 14 F. (2nd) 414, 415; *In Morgan vs. Alliance* (C.C.A. 6), 176 F. 100, 106-7; *Rubber Co. vs. Panther Co.* (C.C.A. 1), 260 F. 934, 937; *Gynex Corp. vs. Dilex Institute* (C.C.A. 2), 85 F. (2d) 103; *Simplex Ring Co. vs. Horton Co.* (C.C. A. 2), 61 F. (2d) 748, 750; *General Elec. Co. vs. Bullock Elec. Mfg. Co.* (C.C.A. 6), 152 F. 427, 431; *Byers Mach. Co. vs. Keystone Driller Co.* (C.C.A. 6), 44 F. (2d) 283, 284; *Kennicott Co. vs. Holt Ice & Cold Storage Co.* (C.C.A. 7), 230 F. 157, 160; *Warren S. P. Co. vs. Blake & Knowles S. P. Works* (C.C.A. 1), 163 F. 263, 277; *Stromberg Motor Devices Co. v. Zenith Carburetor Co.* (C.C.A. 7), 254 F. 68, 81; *Jackson Fence Co. v. Peerless Co.* (C.C.A. 6), 228 F. 691.

In solicting a patent it is not the duty of the applicant to point out in his application that his asserted invention embodies new structures, functions and results over the prior art. It is the duty of the Patent Office Examiner to point out wherein he does not deem it to be new, and to cite "the best references at his command" (Patent Office Rule 66) to establish his point. Similarly in a suit for infringement of an issued patent it is not the duty of the plaintiff to point out that his patent enjoys new structures, functions, and results over the prior art. It is rather the duty of the defendant to point out wherein he does not deem the patent to be new and to cite as required by the statute. (U.S.C.A. 35: 69) the prior references which in his mind establish his defense.

If the opinion below were law, this procedure would be different. The applicant, of course, could not be expected to guess correctly what examples of prior art might in the future be cited against him by examiners and possible infringers. Therefore it would be his duty to ascertain in advance and point out in his application the new functions and results of his invention over all of the prior art in existence, and each and every example thereof.

Is a patentee to be condemned for not including in his specification an allegation of every advantage of his patent over every example of prior art that might ever be cited against him in any infringement suit he may bring in the future?

Patent solicitors sometimes point out the advantages of the invention over the *practiced art*. But even this is frowned upon by the patent office, and applicants are frequently required to cancel such matter on the ground of disregard of U.S.C.A. 35: 33. The opinion suggests that the Patent Office now change its rule to require applicants to include in their specifications dissertations on the advantages of their inventions over prior paper patents, domestic and foreign, in which no one is ever likely to be interested except an infringer seeking to destroy a patent he has violated. In the light of the decision below they must do this if valid patents are to issue.

We submit that this decision is probably erroneous.

Writ Prayed For Will Not Be Improvident

We think that we have directed this petition to the groundwork of the opinion of the Ninth Circuit. Let us, however, discuss some other remarks of the Court below. The Court said:

(905)
"Appellant was not the first to use a clockface device with two hands moving relatively at a fixed ratio to show the position of the rotors."

(907)
"clock faced dial, with two hands, one faster and one slower, already used in that art."

The mere fact of use prior to the Bailey application would not invalidate the Bailey patent, and surely the Court did not intend to hold that it would. It would depend on what was used and when, where and how long it was used. (U.S.C.A. 35:31 and 72.)

But there is no evidence whatever to support the above statements. Indeed, the first use of the mechanism referred to by the Court was by Mr. Bailey himself in May, 1932, while his patent was pending. (281) At this time he made a model of his invention (Exhibit 38), which he showed to various persons interested in radio manufacture in an effort to sell his anticipated patent to the industry. (280-283) The first commercial use of any mechanism such as is referred to by the Court was by Radio Corporation of America in its frankly infringing model "RCA 1934-1936" (Exhibit 18, 423 123, 255) Of this

model, about 300,000 sets were sold the first year. (124)

Rysman, Hall, Huth and Respondent's other references, are purely "paper patents". There is no evidence that any embodiment of any of them was ever made, used or sold.

The Court says:

(905)

> "It is difficult to appreciate the claimed distinction between step-up and step-down. . . . If Rysman had desired to have the pointer on the sleeve move faster than that on the axis he could have accomplished the result using the same gear train by reversing the position of the gears."

In view of the other structural differences between Rysman and Bailey, we cannot believe that the Court below intended to invalidate the patent in suit on nothing but the difference between "step-up" and "step-down".

The Court failed, however, to comprehend Rysman any better than the Master. If Rysman had reversed his motion reduction gear train n o p q and had made of it a motion multiplying gear train, he would have provided a fast pointer turning twelve times as fast as his condenser shaft, and a second fast pointer turning 144 times as fast as his condenser shaft, and no slow pointer at all. His device would not give a unique reading of his condenser shaft and would be useless. The Court said further, speaking of Hall:

(906)
"The fast pointer he attaches to the axis of the condenser as is done by Rysman."

A pointer attached to a condenser shaft would be a slow, not a fast pointer. The axis of Rysman's condenser shaft is at right angle to that of his fast pointer shaft f. A pointer on his condenser shaft would be inside his cabinet. There is no ground here for invalidating the patent.

The Court said: (906)

"There was no new function performed by the combination. The function performed was merely to indicate the location of the rotor blades, is in prior devices. Hence, it was not patentable as a combination of old elements. . . *Grinnell Washing Machine Co. vs. Johnson Co.*, 247 U.S. 426; 38 S. Ct. 547; 62 L. Ed. 1196. What we have here is an aggregation of parts assembled by mere mechanical skill."

If we are to concede, as the Ninth Circuit thought, that no new functions and results are to be attributed to the patent in suit because none are set out therein, then the patent would be invalid.

If we are to attribute to the patent in suit the new functions and results established by the evidence even though not set forth in the patent, the *Grinnell Case* indicates that the patent must be upheld.

Respectfully submitted,

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